

**IN THE CLAIMS:**

Claims 1-19, 23, 25, 30, 31, 33-43, 45, 47, 48, and 52-53 have been or are canceled herein without prejudice or disclaimer. Claims 20, 24, 32, 46, 50, and 51 have been amended herein. New claims 54 through 57 are to be added. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

**Listing of Claims:**

1. through 19. (Canceled).

20. (Withdrawn – currently amended) A method of identifying at least one compound capable of modulating the interaction between a complex of a presenilin and a type I membrane protein, said method comprising:

treating said complex or binding domains of said complex with at least one compound;

monitoring the interaction of the presenilin and said type I transmembrane protein; and

determining whether said at least one compound modulates the interaction between presenilin and said type I transmembrane protein thus identifying a compound capable of modulating said interaction between a complex of presenilin and a type I transmembrane protein,

wherein the type I transmembrane protein's binding domain comprises the sequence of amyloid precursor protein set forth in SEQ ID NO:5.

21. (Withdrawn) The method of claim 20, wherein said monitoring comprises measuring the effect of said at least one compound on the interaction between presenilin and said type I transmembrane protein.

22. (Withdrawn) The method of claim 20, wherein said presenilin comprises presenilin 1 or presenilin 2.

23. (Canceled).

24. (Withdrawn – currently amended) The method of claim 20, wherein said binding domain of said presenilin comprises at least one of the first transmembrane domain and the last eight carboxyterminal amino acids of a ~~presenilin~~ presenilin.

25. (Canceled).

26. (Withdrawn) The method of claim 20, further comprising introducing said at least one compound to presenilin and said type I transmembrane protein.

27. (Withdrawn) The method of claim 26, wherein said introducing comprises administering said at least one compound to a subject.

28. (Withdrawn) The method of claim 20, wherein said introducing modulates the turnover of said type I transmembrane protein.

29. (Withdrawn) The method of claim 20, wherein said introducing modulates presenilin mediated processing of said type I transmembrane protein.

30. (Canceled).

31. (Canceled).

32. (Withdrawn-currently amended) A method for producing a pharmaceutical composition, said method comprising:  
identifying a compound capable of modulating the interaction between a presenilin and a type I transmembrane protein, said identifying comprising:  
treating said ~~presenilin~~ presenilin and type I transmembrane protein with at least one compound; and  
discovering at least one first compound ~~of said at least one compound~~ capable of modulating the interaction between said presenilin and type I transmembrane; and  
providing said at least one first compound with a pharmaceutically acceptable carrier;  
wherein said at least one compound is selected from the group consisting of SEQ ID NO: 7 and SEQ ID NO: 12.

33. through 43. (Canceled).

44. (Previously presented) A compound capable of modulating the interaction between a complex of a presenilin and a type I membrane protein, said compound consisting of:  
a peptide selected from the group consisting of SEQ ID NO: 7 and SEQ ID NO: 12.

45. (Canceled).

46. (Currently amended) A compound capable of modulating the interaction between a complex of a presenilin and a type I membrane protein, said compound consisting of:  
a peptide selected from the group consisting of SEQ ID NO: 5, ~~SEQ ID NO: 8~~, and SEQ ID NO: 13.

47. (Canceled).

48. (Canceled).

49. (Previously presented) A pharmaceutical composition comprising:  
a pharmaceutically acceptable carrier; and  
a compound, the compound consisting of a peptide selected from the group consisting of  
SEQ ID NO: 7 and SEQ ID NO: 12.

50. (Currently amended) A pharmaceutical composition comprising:  
a pharmaceutically acceptable carrier; and  
a compound, said compound consisting of a peptide selected from the group consisting of  
SEQ ID NO: 5, ~~SEQ ID NO: 8~~, and SEQ ID NO: 13.

51. (Withdrawn – currently amended) A method of modulating the interaction  
between [[a]] complexes of a presenilin and a type I membrane protein, said method comprising:  
administering a means for modulating the interaction between [[a]] complexes of a  
presenilin and a type I membrane protein, wherein said means consists of a peptide selected from  
the group consisting of SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 12, and SEQ ID NO: 13;  
and  
modulating the interaction between [[a]] complexes of a presenilin and a type I membrane  
protein.

52. through 53. (Canceled).

54. (New) The compound of claim 44, wherein the peptide consists of SEQ ID NO:7.

55. (New) The compound of claim 44, wherein the peptide consists of SEQ ID NO:12.

56. (New) The compound of claim 46, wherein the peptide consists of SEQ ID NO:5.

57. (New) The compound of claim 46, wherein the peptide consists of SEQ ID NO:13.